

## GALWAY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Rahally M6 Road Cut</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous</b>
<b>TOWNLAND(S)</b>	<b>Rahally, Cross</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>New Inn</b>
<b>SIX INCH MAP NUMBER</b>	<b>86</b>
<b>ITM CO-ORDINATES</b>	<b>565930E 725860N (centre of section)</b>
<b>1:50,000 O.S. SHEET No. 46</b>	<b>GSI BEDROCK 1:100,000 SHEET NO. 15</b>

### **Outline Site Description**

This site comprises a 500 m long road cutting along the M6 motorway, with both high and low cliffs of rock overlain by a veneer of glacial till.

### **Geological System/Age and Primary Rock Type**

The rocks are limestones of Carboniferous age (approximately 330 million years). They are part of the 'Calp' limestone Lucan Formation.

### **Main Geological or Geomorphological Interest**

The rocks are limestones of Viséan age, from the Lower Carboniferous Period, part of the Lucan Formation. The sections have been cut through a high hill, therefore forming some very high cliffs with spectacular bedrock exposure.

The limestone beds generally dip gently to the west, but the beds in much of the cutting are essentially flat lying.

A well developed epikarst layer can be seen along the high, southern section of the motorway cutting. Groundwater seeps out from beneath this layer and a number of tufa curtains have developed along the face. Tufa is usually formed via the precipitation of calcium carbonate, and is spongy or porous in nature. The tufa curtains are vegetated, with much of the vegetation calcified.

The bedrock is overlain by approximately 3 m depth of glacial till subsoil, which was deposited by the last ice sheet to cover the area, and the bedrock has been planed off along a clear erosive boundary while this material was being deposited.

### **Site Importance – County Geological Site**

The site is of County Geological Site importance as a scientifically useful, well exposed representative section of Carboniferous limestone in mid-Galway, where it is otherwise very poorly exposed. Further comparisons by experts in Carboniferous limestone geology may indicate the bedrock at the site is of national importance as representative of otherwise relatively poorly exposed Carboniferous stratigraphy in the area of central Galway.

### **Management/promotion issues**

This road cutting is completely unsuitable for any general public visits as it is on a motorway. The GSI will liaise with TII, the County Council and appropriate authorities to discuss appropriate options for dissemination of information about the geological interest of the site.



View west along the Rahally road cut along the M6.



Well developed tufa curtain in the central portion of the southern section.



Groundwater seeping out from beneath epikarst layer at the top of the section.



Gently dipping beds at the western end of the northern section.

